

ABSTRACT**EXTERNAL FAULT TOLERANT SHARED MEMORY UNIT IN A
DISTRIBUTED MULTIPROCESSING SYSTEM**

5 A distributed multiprocessing system, comprises several hosts (2, 3, 4)
connected to a network (1); each host has a processing unit (21, 31, 41) and internal
memory (22, 32, 42) accessed by the processing unit; in addition, each host further
has an access device (24, 34, 44) connected to a fault tolerant external memory unit
10 (6) by a fast connection (25, 35, 45). Each processing unit accesses the external
memory unit transparently.

The processing units of the distributed multiprocessing system thus share the
same view of the external memory unit. This makes it possible to use symmetric
multiprocessing memory sharing mechanisms, in a distributed multiprocessing
system, due to the reduction of latency overheads by 4 or 5 orders of magnitude
15 compared with standard DMP interconnect methods

Figure 1.